

Atty. Docket No. URE02 P-309 Express Mail No. EV432932256US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

: Thomas M. Kurth et al.

Appln. No

: 09/944,212

For

: TRANSESTERIFIED POLYOL HAVING SELECTABLE AND INCREASED FUNCTIONALITY AND URETHANE MATERIAL

PRODUCTS FORMED USING THE POLYOL

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 RECEIVED MAY 1 9 2004 TC 1700

Dear Sir:

THIRD SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.97(b)

Pursuant to 37 CFR §§1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached Form PTO-1449. This Third Supplemental Information Disclosure Statement is being filed after the events recited in §1.97(b) but to the undersigned's knowledge, before the mailing date of either a Final Action or a Notice of Allowance. Under the provisions of 37 C.F.R. §1.97(c), this Third Supplemental Information Disclosure Statement is accompanied by a fee of \$180.00, as specified by §1.17(p).

To the knowledge of the undersigned, no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, after making a reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing date of this Information Disclosure Statement.

Copies of the listed documents are submitted herewith along with Form PTO-1449. Based upon the English language abstract, Applicants believe that DE19643816 involves the preparation of polyurethane comprises reacting polyisocyanates (A) with compounds (B) containing isocyanate reactive groups, where (A) and (B) are produced from an increase in raw materials and also claimed are polyurethanes obtained as above. Also, based upon the English

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language abstract, Applicants believe that JP5186556 involves a biodegradable polyurethane containing a segment derived from at least one vegetable component selected among (i) starch or a modified product thereof, (ii) molasses, (iii) an agricultural polysaccharide waste and (iv) a hydroxy-modified vegetable oil. Applicant also believes that, based upon the English language abstract, JP5186556 involves a process for producing a biodegradable polyurethane comprising reacting a polyisocyanates with an organic solvent solution of at least one vegetable component selected among (i) starch or a modified product thereof, (ii) molasses, (iii) an agricultural polysaccharide waste and (iv) a hydroxy-modified vegetable oil.

Applicants respectfully request that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that all of the listed documents are material or constitute "prior art." If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

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If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 16-2463.

Respectfully submitted,

THOMAS M. KURTH ET AL.

By: Price, Heneveld, Cooper, DeWitt & Litton, LLP

5/10/2004 Date

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Grand Rapids, MI 49501

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APPLICANT(S) Thomas M. Kurth et	al.

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FILING DATE

August 31, 2001

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER					MBEI	R	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPRO- PRIATE	
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FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
	"Morphology of Water-Blown Flexible Polyurethane Foams," Armisted et al., Journal of Applied Polymer Science, Vol. 35, pp. 601-29, 1988
	"Renewable Raw Materials - An Important Basis for Urethane Chemistry," Urethane Technology, Vol. 14, No. 2, April/May 1997, Crain Communications 1997

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	"Model/MDI/Butendiol Polyurethanes: Molecular Structure, Morphology, Physical and Mechanical Properties," Christenson et al., Journal of Polymer Science; Part B: Polymer Physics, Vol. 24, pp. 1401-1439, 1986
	"Chemoenzymatic Synthesis of Urethane Oil Based on Special Functional Group Oil," M.D. Bhabhe and V.D. Athawale, Journal of Applied Polymer Science, Vol. 69, 1451-1458, 1998

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EXAMINER INITIAL	
	U.S. Patent Application Publication No. 2003/0143910 A1, published July 31, 2003, to Mashburn et al.
	U.S. Patent Application Publication No. 2002/0192456 A1, published December 19, 2002, to Mashburn et al.

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	Nakamura et al., Kobunshi Robunshu, "Preparation of Polyurethane Foam From Waste Vegetable Oil," 50 (11), pp. 881-886, (1993)
	Colvin et al., UTECH Asia, "Low Cost Polyols from Natural Oils," Paper 36, 1995

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